

## SEARCH REQUEST FORM

Requestor's Name: \_\_\_\_\_ Serial Number: \_\_\_\_\_  
Date: \_\_\_\_\_ Phone: \_\_\_\_\_ Art Unit: \_\_\_\_\_

**Search Topic:**

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

**STAFF USE ONLY**

Date completed: 12/24/58  
Searcher: J.W.  
Terminal time: 10  
Elapsed time: \_\_\_\_\_  
CPU time: \_\_\_\_\_  
Total time: 10  
Number of Searches: 1  
Number of Databases: 0

Search Site	Vendors
<input type="checkbox"/> STIC	<input checked="" type="checkbox"/> IG <i>m/r</i>
<input checked="" type="checkbox"/> CM-1	<input type="checkbox"/> STN
<input type="checkbox"/> Pre-S	<input type="checkbox"/> Dialog
Type of Search	
<input checked="" type="checkbox"/> N.A. Sequence	<input type="checkbox"/> APS
<input checked="" type="checkbox"/> A.A. Sequence	<input type="checkbox"/> Geninfo
<input type="checkbox"/> Structure	<input type="checkbox"/> SDC
<input type="checkbox"/> Bibliographic	<input type="checkbox"/> DARC/Questel
	<input type="checkbox"/> Other

1. 5,770,704, Jun. 23, 1998, Receptor activation with inactive hepatocyte growth factor ligands; **Paul J. Godowski**, 530/402; 424/194.1, 195.11; 530/399 [IMAGE AVAILABLE]
2. 5,766,863, Jun. 16, 1998, Kinase receptor activation assay; **Paul J. Godowski**, et al., 435/7.21, 6, 7.4, 7.94, 69.1, 975; 436/501, 518, 531, 548; 530/388.22, 388.26, 389.6, 391.3 [IMAGE AVAILABLE]
3. 5,763,584, Jun. 9, 1998, Receptor activation with hepatocyte growth factor agonists; **Paul J. Godowski**, 530/402; 424/194.1, 195.11; 530/399 [IMAGE AVAILABLE]
4. 5,709,858, Jan. 20, 1998, Antibodies specific for Rse receptor protein tyrosine kinase; **Paul J. Godowski**, et al., 424/143.1, 139.1; 435/7.4; 530/387.3, 387.9, 388.22, 391.1, 391.3 [IMAGE AVAILABLE]
5. 5,696,086, Dec. 9, 1997, Methods and kits using macrophage stimulating protein; Hava Karsenty Avraham, et al., 514/12; 530/351, 380 [IMAGE AVAILABLE]
6. 5,684,136, Nov. 4, 1997, Chimeric hepatocyte growth factor (HGF) ligand variants; **Paul J. Godowski**, 530/399, 387.3 [IMAGE AVAILABLE]
7. 5,580,963, Dec. 3, 1996, Single-chain hepatocyte growth factor variants; **Paul J. Godowski**, et al., 530/399 [IMAGE AVAILABLE]
8. 5,547,856, Aug. 20, 1996, Hepatocyte growth factor variants; **Paul J. Godowski**, et al., 435/69.4, 320.1, 325; 530/399; 536/23.51 [IMAGE AVAILABLE]
9. 5,328,837, Jul. 12, 1994, Hepatocyte growth factor protease domain variants; **Paul J. Godowski**, et al., 435/69.4; 530/399; 536/23.51 [IMAGE AVAILABLE]
10. 5,316,921, May 31, 1994, Single-chain hepatocyte growth factor variants; **Paul J. Godowski**, et al., 435/69.4; 530/399; 536/23.51 [IMAGE AVAILABLE]

=> d his

(FILE 'USPAT' ENTERED AT 10:10:32 ON 31 DEC 1998)  
L1 1 S (TIE LIGAND?) /TI  
L2 1 S (TIE LIGAND?) /AB  
E GODOWSKI, P/IN  
L3 10 S E4  
E GURNEY, AU/IN

RESULT 1  
ID R94605 standard; Protein; 496 AA.  
AC R94605;  
DT 28-OCT-1996 (first entry)  
DE Human TIE-2 ligand 2 derived from pBluescript KS clone.  
KW Angiogenesis; neovascularisation; tumour development; wound healing;  
KW TIE; tyrosine kinase with Ig and EGF homology domains; vector;  
KW recombinant; clone; diagnosis; ischaemia; thromboembolytic disease;  
KW atherosclerosis; inflammation; diabetes; ligand bodies; delivery;  
KW targeting.  
OS Homo sapiens.  
PN WO9611269-A2.  
PD 18-APR-1996.  
PF 06-OCT-1995; U12935.  
PR 07-OCT-1994; US-319932.  
PR 27-OCT-1994; US-330261.  
PR 02-DEC-1994; US-348492.  
PR 09-DEC-1994; US-353503.  
PR 17-JAN-1995; US-373579.  
PR 06-APR-1995; US-418595.  
PA (REGE-) REGENERON PHARM INC.  
PI Aldrich TH, Bruno J, Davis S, Goldfarb M, Jones PF;  
PI Maisonpierre PC, Radziejewski C, Yancopoulos GD;  
DR WPI; 96-209850/21.  
DR N-PSDB; T14650.  
PT Nucleic acid encoding TIE-2 ligand and related vectors - useful in  
PT diagnosis and treatment of neovascularisation, tumours, etc., or to  
PT promote wound healing, etc.  
PS Claim 2; Fig 6; 84pp; English.  
CC R94605 is a human TIE-2 (hTIE-2) ligand 2 derived from a pBluescript  
CC KS clone. hTIE-2 ligand DNAs of the invention are recombinant versions  
CC of the native ligand coding sequences and may be used to produce the  
CC ligands at a high yield. Antibodies and receptor bodies that bind to  
CC TIE-2 ligands may be used to inhibit angiogenesis and neovascularisation  
CC (e.g. associated with tumour development) and the TIE-2 ligands  
CC themselves are useful to promote neovascularisation and wound healing  
CC e.g. for treatment of ischaemia. TIE-2 ligands are also useful to  
CC treat thromboembolytic disease, atherosclerosis, inflammation and  
CC diabetes. Ligand bodies contg. TIE-2 ligands may also be useful for  
CC the delivery and targeting of growth factors, toxins etc. to sites  
CC where their presence is advantageous.  
SQ Sequence 496 AA;

Query Match 18.5%; Score 688; DB 18; Length 496;  
Best Local Similarity 30.8%; Pred. No. 6.64e-48;  
Matches 129; Conservative 99; Mismatches 174; Indels 17; Gaps 16;

Db 84 enimennntqwlmklenyiqdnmk-kemveiqqnnavqnqtavmiegtnllnqtaeqtrkl 142  
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Qy 77 EVLLENRVH-KQELELLNNELLKQKRQIETLQQLVEVDGGIVSEV-KLLRKESRNMNSRV 134

Db 143 tdveaqvlnqttrlelqllehslstnklekqildqtseinklqdknsflekkvlamedkh 202  
|:: |::|: | : : ::| : ||::|:||::: | | || | | :  
Qy 135 TQLYMQLLHEIIR-K-R--DNALELSQLENRILNQTADMLQIASKYKDLEHKYQHLATLA 190

Db 203 iiqlqsikeekdqlq-vlvskqnsiieelek-kivtatvnnsvl-qkqqhdmetvn-nl 258  
| : | : : : | : : : : : : | : | :: | : : : | : :  
Qy 191 HNQSEIIAQLEEHQRVPSARPVQPAPPAPPRVYQPPTYNRIINQISTNEIQSDQNLKV 250

Db 259 ltm-mstsnsakd-ptvakeeqisfrdcaevfksghtngiytlfpnsteeik-aycdm 315  
| ::| : |: : : ||| : : || |::|| | |::|: :: ||

Qy 251 LPPPLPTMPTLTSIPLSSTDKGPGWRDCLQALEDGHDTSSIY-LVKPENTNRLMQVWCDQ 309  
Db 316 eaggggwtiqrredgsvdqrtwkeykvgfgnpsgeylgnefvsqqltnqqryvlkihl 375  
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Qy 310 RHDPGGWTVIQRRLDGSVNFFRNWETYKQGFGNIDGEYWLGLENIYWLTNQGNYKLLVTM 369  
Db 376 kdwegneayslyehfylsseelnyrihlgltgtakissisqpgndfstkdgdndkcic 435  
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Qy 370 EDWSGRKVFAEYASFRLEPESEYYKLRLGRYHGNAGD-SFTWHNGKQFTTLDRDHVDYTG 428  
Db 436 kcsqmltgwwfdacgpsnlngmyypqrqntnkf-ngikwywkgsgyslkattmmirp 493  
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Qy 429 NCAHYOKGGWWYNACAHSNLNGWYRGGHYRSRYQDGVYWAEFRGGSYSLKKVVMMIRP 487